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9629	7590	08/09/2006		EXAMINER		
<del>-</del>		OCKIUS LLP	RUDOLPH, VINCENT M			
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, and the second				2625		
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/841,023	OTSUBO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Vincent M. Rudolph	2625				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 22 M 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final.  nce except for formal matters, pro					
Disposition of Claims						
4)  Claim(s) 2-22,24 and 25 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 2-22,24 and 25 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 25 April 2001 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	☑ accepted or b) ☐ objected to drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Di 5) Notice of Informal F 6) Other:					

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### **DETAILED ACTION**

# Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 22 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The program claimed is merely a set of instructions per se. Since the program, which is commanding a computer for image processing within the claim, is merely a set of instructions not embodied on a computer readable medium to realize the software architecture functionality, the claimed subject matter is non-statutory. See MPEP § 2106 IV.B.1.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato (691).

Regarding claim 24, Sato ('691) discloses an image processor, such as a print controller (See Figure 1, Element 102), used for recognizing a specific image within input image data (See Figure 7; Col. 8, Line 13-21). This includes a determination unit

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that determines whether the input image data includes a predetermined characteristic (it detects if a mark exists in the attached image, See Col. 7, Line 27-34), an output image data generation unit that generates an output image data based upon the input image data and outputs the output image data (See Col. 7, Line 22-23). It also includes a control unit (CPU, See Figure 3, Element 104) to control the determination unit and the output image data generation unit in order to be operated in parallel (the CPU of the print controller controls, or governs, the operations within it, See Col. 6, Line 38-49, including the determination for the image data as well as the generating of the output image data so that they are operated coordinately, See Col. 7, Line 12-34).

Regarding claim 25, Sato ('691) discloses a recognition unit that recognizes whether the specific image exists in the input image data (it detects if a mark exists in the attached image, See Col. 7, Line 27-34). The recognition unit operates in parallel with the output image data generation unit (it operates coordinately with the output image generation unit within the print controller, See Figure 3, Element 102, in order to generate and process the image data properly, See Col. 7, Line 22-34).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4 and 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato ('691) in view of Takaoka ('905).

Regarding claim 2, Sato ('691) discloses an image processor, such as a print controller (See Figure 1, Element 102), used for recognizing a specific image within an input image data (See Figure 7; Col. 8, Line 13-21). The system has a recognition unit, which is used to recognize whether the specific image exists in the input image data (it detects if a mark exists in the attached image, See Col. 7, Line 27-34). It also has a determination unit to tell whether the image data includes a predetermined characteristic, such as a mark to indicate its copyright (See Col. 7, Line 31-34).

Sato ('691) does not disclose having the determination unit control the recognition unit not to recognize the specific image if the predetermined characteristic is not included within the input image data.

Takaoka ('905) discloses having a determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) to determine if the input image data does not include a predetermined characteristic and does not recognize the specific image if it is not included (if the area within the input image data does not contain a character area, See Col. 13, Line 17-23, it proceeds to process the data without further recognition, See Col. 14, Line 41-48).

It would have been obvious to one of ordinary skill at the time of the invention by the applicant to have the determination unit disclosed within Takaoka ('905), and incorporate it into image processor of Sato ('691) to not recognize the specific image if the predetermined is not included in the input image data because it prevents images with a predetermined characteristic from not being detected and passed through the recognition unit.

Regarding claim 3, Sato ('691) does not disclose the determination unit determines whether a raster image within the image data includes the predetermined characteristic or not.

Takaoka ('905) discloses the determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) determines if the raster image in the image data has a predetermined characteristic or not (if the area within the input image data contains a character area or not, See Col. 13, Line 17-27).

It would have been obvious to one of ordinary skill at the time of the invention by the applicant to have the determination unit determine if it includes a predetermined characteristic, such as the one disclosed within Takaoka ('905), and incorporate it into the image processor of Sato ('691) because it is able to thoroughly analyze the raster image in order to prevent images with a predetermined characteristic from not being detected.

Regarding claim 4, Sato ('691) does not disclose the determination unit determines whether plural raster images are continuous if the raster images exist in the data, which is determined by their predetermined characteristic as one raster image.

Takaoka ('905) discloses the determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) discloses that plural raster image are continuous (are able to continue the printing process) or not if they exist in the image data (if the character areas are included within the image, See Col. 13, Line 11-19).

Takaoka ('905) does not disclose whether or not the raster images exist determined as being continuous have the predetermined characteristic as one raster image, but it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have a page of a document contains plural images if the user desires to include it. So, if any of the images contained within the document have the predetermined characteristic, the determination unit determines if the plural raster images are continuous. Thus, by incorporating the determination unit of Takaoka ('905) into the image processor of Sato ('691) it allows multiple raster images to be checked for a characteristic for different areas rather than only looking for a specific area.

Regarding claim 9, Sato ('691) discloses an image processor, such as a print controller (See Figure 1, Element 102), used for recognizing a specific image within the input data (See Col. 8, Line 13-21). The system has a recognition unit, which is used to recognize whether the specific image exists in the input image data (it detects if a mark exists in the attached image, See Col. 7, Line 27-34). It also has a determination unit to tell whether the image data includes a predetermined characteristic, such as a mark to indicate its copyright (See Col. 7, Line 31-34).

Sato ('691) does not disclose having the determination unit control the recognition unit to execute processing at a lower resolution of output, determines the result, and controls the recognition unit not to execute the processing at a higher resolution if the possibility of including the specific image in the input image data is not higher than a predetermined level.

Takaoka ('905) discloses having a determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) to control a recognition unit (reading unit, See Figure 12, Element 118; Col. 22, Line 18-21) to process the image at a lower resolution than it was originally (in order to judge what the image indicates, See Col. 23, Line 28-34). If the image does not contain certain characters, then that portion is controlled not to be processed at a higher resolution (the character does exist within that portion, See Col. 24, Line 32-37).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have the determination unit disclosed by Takaoka ('905) and incorporate it into the image processing system of Sato ('691) because it optimally sets the initial conditions of an optical recognition without significantly adding time to the recognition.

Regarding claim 10, Sato ('691) discloses an output image data generation unit to generate and output the output image data (See Col. 7, Line 22-23). This unit temporarily stops, such as pausing while the process is going from one step to another, the generation or the output of the image data if the determination unit decides that the recognition unit is needed for processing the image data (See Col. 7, Line 24-34).

Regarding claim 11, Sato ('691) discloses an output image data generation unit to generate and output the output image data (See Col. 7, Line 22-23). This unit temporarily stops, such as pausing while the process is going from one step to another, the generation or output of the image data if the determination unit determines that the

possibility of including a specific image in the image data is higher than a predetermined level as a result of the recognition unit processing (See Col. 8, Line 9-21).

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Regarding claim 12, Sato ('691) discloses an output image data generation unit to generate and output the output image data (See Col. 7, Line 22-23). The output image data generation unit also changes the quantity, for example from one page to zero, of the output image data if it is determined that the possibility of including the specific image, as a result of the recognition unit, in the image data is higher than a predetermined level (a specific image within the image data has a mark and is copyrighted, See Col. 7, Line 35-45).

Sato ('691) does not disclose having the determination unit execute processing for making determination on image data for every predetermined unit being processed.

Takaoka ('905) discloses having a determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) for executing processing of determining each image data per predetermined unit being processed (receives and determines the image data per character area, See Col. 13, Line 11-16).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include a determination unit, such as the one disclosed within Takaoka ('905), and incorporate it into the image processor of Sato ('691) because it is able to analyze the area within the image data in order to prevent certain images from being outputted.

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Regarding claim 13, Sato ('691) discloses the output image data generation unit stops the generation or output of the image data if the recognition unit detects the existence of the specific image (See Col. 7, Line 35-45).

Regarding claim 14, Sato ('691) discloses the output image data generation unit outputs fixed data, such converting the image data all into a blank page, as the output image data if the recognition unit detects the specific image (See Col. 10, Line 1-9).

Regarding claim 15, Sato ('691) discloses the output image data generation unit outputs a character string informing that the existence of the specific image is recognized (a warning display on the host computer, Col. 10, Line 1-6) if the recognition unit detects the specific image.

Regarding claim 16, Sato ('691) discloses an output image data generation unit to generate and output the output image data (See Col. 7, Line 22-23). This unit stops the generation or output of the image data if the recognition unit detects the existence of the specific image, or a detection mark attached to the image (See Col. 7, Line 35-45).

Regarding claim 17, Sato ('691) discloses a recognition unit, which is used to execute recognition processing for an output image data (See Col. 7, Line 27-34).

Sato ('691) does not disclose having the determination unit determine a mode for generating the output image data in order to command the recognition unit to execute the recognition processing if it is a predetermined mode.

Takaoka ('905) discloses having a determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) to determine a mode for

generating the output image (a mode to output an image depending if a character area is detected, See Col. 13, Line 11-27).

It would have been obvious to one of ordinary skill at the time of the invention by the applicant to have the determination unit, such as the one disclosed within Takaoka ('905), and incorporate it into the recognition unit within the image processor of Sato ('691) to execute recognition processing if the image data is a predetermined mode because it prevents images without a predetermined mode from being detected and passed through to the recognition unit.

Regarding claim 18, Sato ('691) does not disclose the determination unit receives processing in units of page.

Takaoka ('905) discloses that the determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) executes determination processing in units of page (an area analysis of a page in order to determine a particular character area, See Figure 5A; Col. 13, Line 11-16).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include a determination unit, such as the one disclosed by Takaoka ('905), and incorporate it into the image processor of Sato ('691) because it allows the image data to go through a thorough analysis page-by-page rather than doing a quick check of any character area for the whole image data.

Regarding claim 19, Sato ('691) discloses an image processor, such as a print controller (See Figure 1, Element 102), used for recognizing a specific image within an input image data (See Col. 6, Line 38-44). The system has a recognition unit, which is

used to recognize whether the specific image exists in the input image data (it detects if a mark exists in the attached image, See Col. 7, Line 28-35). It also has a determination unit to tell whether the image data includes a predetermined characteristic, such as a mark to indicate its copyright (See Col. 7, Line 31-34).

Sato ('691) does not disclose having a determination unit that determines a mode for generating the output image data in order to control the recognition unit not to execute the recognition processing if it is not a predetermined mode.

Takaoka ('905) discloses having a determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) to determine a mode for generating the output image (a mode to output an image depending if a character area is detected, See Col. 13, Line 11-27) and does not execute recognition processing if it is not a predetermined mode (if the image data does not contain a predetermined mode, such as a character area, See Col. 13, Line 17-23, it proceeds to process the data without further recognition, See Col. 14, Line 41-48).

It would have been obvious to one of ordinary skill at the time of the invention by the applicant to have the determination unit, such as the one disclosed within Takaoka ('905), and incorporate it into the recognition unit within the image processor of Sato ('691) to not execute recognition processing if the image data is a not predetermined mode because it prevents images with a predetermined mode from not being detected and passed through to the recognition unit.

Regarding claim 20, Sato ('691) discloses an image processor, such as a print controller within an image processing system (See Figure 1, Element 102), that

generates an output image data based on the input image data (See Col. 7, Line 19-26) and then outputs it to a device, such as an image forming device (See Figure 1, Element 103) provided with a function for recognizing a specific image (See Col. 8, Line 13-21). It has a determination unit to tell whether the image data includes a predetermined characteristic, such as a mark to indicate its copyright (See Col. 7, Line 31-34). It also has an output image data generation unit that generates the output image data based upon the input image data and outputs the output image data with added information, such as a warning display on the host computer (See Figure 8A and 8B), that there is a possibility of including the specific image in the output image data if the determination unit determines the input image data includes the predetermined characteristic (See Col. 7, Line 35-45, as well as it also converts the image data into a blank image and outputs it, See Col. 10, Line 1-9).

Sato ('691) does not disclose having the determination unit control the recognition unit not to recognize the specific image if the predetermined characteristic is not included within the input image data,

Takaoka ('905) discloses having a determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) to determine if the input image data does not include a predetermined characteristic and does not recognize the specific image if it is not included (if the area within the input image data does not contain a character area, See Col. 13, Line 17-23, it proceeds to process the data without further recognition, See Col. 14, Line 41-48).

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It would have been obvious to one of ordinary skill at the time of the invention by the applicant to have the determination unit disclosed within Takaoka ('905), and incorporate it into image processor of Sato ('691) to not recognize the specific image if the predetermined is not included in the input image data because it prevents images with a predetermined characteristic from not being detected and passed through the recognition unit.

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Regarding claim 21, Sato ('691) discloses an image processor, such as a print controller (See Figure 1, Element 102), used for recognizing a specific image within the input data (See Col. 6, Line 38-44). The system has a recognition unit, such as the product information, is used to recognize whether the specific image exists in the input image data (it detects if a mark exists in the attached image, See Col. 8, Line 13-21). It also has a determination unit for determining whether the possibly of including the specific image exists in the image data (See Col. 7, Line 27-45).

Sato ('691) does not disclose having the determination unit control the recognition unit not to execute recognition processing if the information does not exist.

Takaoka ('905) discloses having a determination unit (character recognition / orientation discrimination unit, See Figure 1, Element 13) to determine if possibility of including the specific image within the image data exists and does not execute recognition processing if it does not (if the possibility of not having a character area within the input image data, See Col. 13, Line 17-23, it proceeds to process the data without further recognition, See Col. 14, Line 41-48).

It would have been obvious to one of ordinary skill at the time of the invention by the applicant to have the determination unit disclosed within Takaoka ('905), and incorporate it into image processor of Sato ('691) to not recognize the specific image if the information does not exist because it prevents images with a specific image information from not being detected and passed through the recognition unit.

Regarding claim 22, the rationale provided in the rejection of claim 2 is incorporated herein. In addition, the image processor of claim 2 corresponds to the computer-readable storage medium (See Col. 6, Line 37-40) of claim 22 and performs the steps disclosed.

Claim 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato ('691) in view of Takaoka ('905) as applied to claim 2, and further in view of Microsoft Windows NT/95/98.

Regarding claim 5, Sato ('691) does not disclose that determination unit uses the size of the output raster image as a predetermined characteristic.

Microsoft Windows NT/95/98 discloses a feature where the size of a file and other attributes, such as the file name, can be entered to find the results (See Page 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have the size of a file, such as the raster image, disclosed by Microsoft Windows NT/95/98 and incorporate it into the image processing system of Sato ('691) because it helps the user find the specific file desired and determine if the image meets the predetermined characteristic.

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Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato ('691) in view of Takaoka ('905) as applied to claim 2, and further in view of Kadowaki ('038).

Regarding claim 6, Sato ('691) does not disclose that the determination unit uses the resolution of the raster image as a predetermined characteristic.

Kadowaki ('038) discloses one of the parameters for the raster image data is the size, which comprises of the resolution, of the raster image in the x and y direction (See Col. 5, Line 53-54), such as 1024x768, for making the determination of the image.

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have the resolution of the raster image data disclosed by Kadowaki ('038) and incorporate it into the image processing system of Sato ('691) because it helps determine the image parameters when judging whether it meets the predetermined characteristic.

Regarding claim 7, Sato ('691) does not disclose that determination unit uses the number of colors of the raster image as a predetermined characteristic.

Kadowaki ('038) discloses one of the predetermined parameters for determining a raster image data is the number of colors component (See Col. 5, Line 46-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have the number of colors of the raster image data disclosed by Kadowaki ('038) and incorporate it into the image processing system of Sato ('691) because it helps determine the image parameters when judging whether it meets the predetermined characteristic.

Regarding claim 8, Sato ('691) does not disclose that the determination unit uses a compression format of the output raster image as a predetermined characteristic.

Kadowaki ('038) discloses one of the predetermined parameters for determining a raster image data is the compression format of the raster image, which is used as the image type of the raster image (See Col. 5, Line 46) and includes compression formats such as JPEG, GIF, BMP, etc.

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have the compression format of the raster image data disclosed by Kadowaki ('038) and incorporate it into the image processing system of Sato ('691) because it helps determine the image parameters when judging whether it meets the predetermined characteristic in parallel.

# Response to Arguments

Applicant discloses the prior art fails to teach or disclose a combination of a recognition unit and a determination unit as well as discloses the determination unit as a CPU. Sato discloses a CPU (central processing unit) within a print controller (See Figure 3, Element 102), but not as the determination unit as the applicant claimed, rather as the control unit that oversees, or controls, the raster image processing (the determination unit) of the print controller, and the recognition unit (the detecting circuit) for detecting a mark on the image (See Col. 6, Line 58-59). In addition, the determination unit determines whether the input image data includes a predetermined characteristic, such as a mark to indicate its copyright (See Col. 7, Line 31-34). Even though the prior art does not disclose having the determination unit control the

recognition unit not to recognize the specific image if the predetermined characteristic is not included within the input image data, by combining the teaching of Sato with the prior art of Takaoka, it is able to meet the claimed limitation. For example, Takaoka discloses having a determination unit to determine if the input image data does not include a predetermined characteristic and does not recognize the specific image if it is not included (if the area within the input image data does not contain a character area, See Col. 13, Line 17-23, it then proceeds to process the data without further recognition, See Col. 14, Line 41-48). Thus, by incorporating it into the teaching of Sato, the determination is able to determine if it does not have a predetermined characteristic within the image data and, as a result, bypass the recognition unit to continue the output processing. Therefore, the prior art is able to meet the claimed limitations.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent M. Rudolph whose telephone number is (571) 272-8243. The examiner can normally be reached on Monday through Friday 8 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Vincent M. Rudolph Examiner Art Unit 2625

KIMBERLY WILLIAMS SUPERVISORY PATENT EXAMINER